

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A method for detaching a frozen charge from the inner wall of a grinding pipe, comprising the steps of:

- controlling ~~the a~~ drive device of the grinding pipe to control the angle of rotation and the speed of rotation of the grinding pipe; and ~~for targeted detachment of the frozen charge;~~

- varying ~~angle of rotation and the~~ speed of rotation of the grinding pipe by the drive device in order to detach the frozen charge from the inner wall of the grinding pipe; and

~~—setting the angle of rotation to oscillate about at least one predetermined angle of rotation.~~

2. (Previously Presented) The method according to claim 1, wherein a maximum value of the angle of rotation smaller than 180° is not exceeded.

3. (Previously Presented) The method according to claim 1, wherein that a maximum value of the angle of rotation smaller than or equal to 90° is not exceeded.

4. (Previously Presented) The method according to claim 1, wherein the maximum value of the angle of rotation is dependent on the material nature of the frozen charge.

5. **(Currently Amended)** The method according to claim 1, wherein the angle of rotation is set to oscillate about a number of predetermined angles of rotation with the same arithmetic sign one after another.

6. **(Currently Amended)** The method according to claim 5, wherein the angle of rotation is set to oscillate about a number of predetermined angles of rotation with different arithmetic signs one after another.

7. (Previously Presented) The method according to claim 1, wherein the grinding pipe is braked abruptly at least once at a predetermined angle of rotation.

8. (Previously Presented) The method according to claim 7, wherein the grinding pipe is braked abruptly to a standstill.

9. (Previously Presented) The method according to claim 1, wherein the same motor is used for detaching the frozen charge as for rotating the grinding pipe during grinding operation.

10. (Previously Presented) The method according to claim 1, wherein the frozen charge is wetted.

11. **(Currently Amended)** A control device for the drive device of a grinding pipe comprising:

- a controller controlling the drive device of the grinding pipe for targeted detachment of a frozen charge, the controller including instructions for: comprising:

- controlling an angle of rotation and speed of rotation of the grinding pipe,and

- ~~means for~~ varying ~~an~~ the angle of rotation and the speed of rotation of the grinding pipe in order to detach the frozen charge from the grinding pipe, and

- ~~—means for setting the angle of rotation to oscillate about at least one predetermined angle of rotation.~~

12. (Previously Presented) The control device according to claim 11, comprising means for defining an operating cycle for the grinding pipe.

13. (Previously Presented) The control device according to claim 11, comprising a field-oriented regulating arrangement.

14. **(Currently Amended)** A drive device for a grinding pipe comprising a control device ~~as claimed in claim 11.~~ for the drive device, the control device configured to control the drive device of the grinding pipe for targeted detachment of a frozen charge, the control device including instructions for:

controlling the speed of rotation of the grinding pipe, and
varying the speed of rotation of the grinding pipe in order to detach the frozen charge from the grinding pipe.

15. (Previously Presented) The drive device according to claim 14, comprising a motor which drives the grinding pipe both during grinding operation and for detaching the frozen charge.

16. (Previously Presented) The drive device according to claim 15, wherein the motor is coupled to a converter.

17. **(Currently Amended)** The drive device according to claim ~~14~~ 15, wherein the motor is a ring motor.

18. **Cancelled.**

19. **(New)** The method according to Claim I, comprising:
controlling the drive device to oscillate the angle of rotation of the grinding pipe about at least one predetermined angle of rotation.

20. (New) The control device according to Claim 11, wherein the controller includes instructions for controlling the drive device to oscillate the angle of rotation of the grinding pipe about at least one predetermined angle of rotation.

21. (New) The control device according to Claim 11, wherein the control device includes instructions for controlling the drive device to oscillate the angle of rotation of the grinding pipe about at least one predetermined angle of rotation.